ACRO

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Typeset Acronyms

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ACRO not only allows you to create acronyms in a simple way but also lets you add them to different classes of acronyms. Lists can be created of separate classes wherever you want the list to appear.

ACRO also provides an option single which ignores acronyms that are used only once in the whole document.

As an experimental feature ACRO also offers the option sort which automatically sorts the list created by \printacronyms.

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1. Licence and Requirements

Permission is granted to copy, distribute and/or modify this software under the terms of the \LaTeX Project Public License (\LPPL), version 1.3 or later (http://www.latex-project.org/lppl.txt). The software has the status "maintained."

\acro{} loads and needs the following packages: expl3, xparse, xtemplate, l3keys2e, zref-abspage and translations [Nie13].

2. About

Acronyms and initialisms are abbreviations formed from the initial components in a phrase or a word. These components may be individual letters (as in CEO) or parts of words (as in Benelux and Ameslan). There is no universal agreement on the precise definition of the various terms nor on written usage. [Wik12a]

After \Wik{} told us what acronyms are and we won’t confuse them with units or other kinds of abbreviations – why would we need another package for them? There are several already: acronym [Oet12], acromake [Tho95], acroterm [Vos10], the abbreviations package abrevs [Swi01] (the current version 1.4 has a bug, though), the nomenclature package nomencl [Vey+05], and of course the mighty glossaries [Tal13]. So there is really no need for a new package.

On the other hand acronym, the best of the acronym specific packages, has one or two shortcomings and sometimes using glossaries seems a bit of an overkill (or simply inconvenient as one has to run makeglossaries, makeindex or xindy, then\textsuperscript{4}). So \acro{} stands somewhere in between (but closer to acronym).

The main reason for the existance of \acro{} is a question on \TeX{} which intrigued me and in consequence led to \acro{} and it’s option single. \acro{} has many similarities with the acronym package. In fact, quite some macros have the same name and meaning.\textsuperscript{4}

\begin{thebibliography}{9}
\bibitem{1} on CTAN as \texttt{l3kernel}: http://mirrors.ctan.org/macros/latex/contrib/l3kernel/
\bibitem{2} on CTAN as \texttt{l3packages}: http://mirrors.ctan.org/macros/latex/contrib/l3packages/
\bibitem{3} on CTAN as oberdiek: http://mirrors.ctan.org/macros/latex/contrib/oberdiek/
\bibitem{4} on CTAN as \texttt{translations}: http://mirrors.ctan.org/macros/latex/contrib/translations/
\bibitem{5} see http://tex.stackexchange.com/q/59840/5049 for solutions.
\bibitem{6} Rumour has it there is going to be a version that can be used without running an external program
\bibitem{7} http://tex.stackexchange.com/q/59449/5049
\bibitem{8} Not in the sense of \texttt{\meaning{}!}
\end{thebibliography}
3. News

3.1. Version 1.6

Support for versions 0.* has been dropped.

4. Basics

4.1. Creating New Acronyms

Acronyms are created with the command \texttt{\textbackslash DeclareAcronym} that can only be used in the preamble.

\texttt{\textbackslash DeclareAcronym\{\textit{id}\}\{\textit{list of keys}\}}

The basic command for declaring an acronym.

This command understands a number of keys which are listed below. Some of them are not described immediately but at appropriate places in the documentation.

\texttt{short = \{\textit{text}\}} \hspace{1cm} \text{(required)}

the short form of the acronym.

\texttt{long = \{\textit{text}\}} \hspace{1cm} \text{(required)}

the long form of the acronym.

\texttt{short-plural = \{\textit{text}\}} \hspace{1cm} \text{Default: s}

the plural ending appended to the short form.

\texttt{long-plural = \{\textit{text}\}} \hspace{1cm} \text{Default: s}

the plural ending appended to the long form.

\texttt{long-plural-form = \{\textit{text}\}}

plural long form of the acronym; replaces the long form when used instead of appending the plural ending.

\texttt{list = \{\textit{text}\}}

if specified this will be written in the list as description instead of the long form.

\texttt{short-indefinite = \{\textit{text}\}} \hspace{1cm} \text{Default: a}

indefinite article for the short form.

\texttt{long-indefinite = \{\textit{text}\}} \hspace{1cm} \text{Default: a}

indefinite article for the long form.
4. Basics

long-pre = \{\langle text\rangle\}

Introduced in version 1.1
(\langle text\rangle) is prepended to the long form in the text but not in the list of acronyms.

long-post = \{\langle text\rangle\}

Introduced in version 1.1
(\langle text\rangle) is appended to the long form in the text but not in the list of acronyms.

alt = \{\langle text\rangle\}
alternative short form.

alt-indefinite = \{\langle text\rangle\}
indefinite article for the alternative form. Default: a

extra = \{\langle text\rangle\}
extra information to be added in the list of acronyms.

foreign = \{\langle original long form\rangle\}
can be useful when dealing with acronyms in foreign languages, see section 4.6 for details.

sort = \{\langle text\rangle\}
if used the acronym will be sorted according to this key instead of its ID.

class = \{\langle text\rangle\}
the class the acronym belongs to.

cite = \{[\langle prenote\rangle][\langle postnote\rangle]\{\langle citation keys\rangle\}\}
a citation that is printed to the acronym according to an option explained later.

short-format = \{\langle \LaTeX\ code\rangle\}
the format used for the short form of the acronym.

long-format = \{\langle \LaTeX\ code\rangle\}
the format used for the long form of the acronym.

first-long-format = \{\langle \LaTeX\ code\rangle\}
the format used for the first long form of the acronym as set with \ac, \acf or \acflike and their uppercase, plural and indefinite forms.

pdfstring = \{\langle\langle text\rangle/\langle plural ending\rangle\rangle\}
used as PDF string replacement in bookmarks when used together with the hyperref package.
The appended plural ending is optional. If you leave it (and the /) the default ending is used.

accsupp = \{\langle text\rangle\}
sets the ActualText key as presented by the accsupp package for the acronym.

index-sort = \{\langle text\rangle\}
If you use the package option index every occurrence of an acronym is recorded to the index and sorted by its ID or (if set) by the value of the sort key. This key allows to set an individual sorting option for the index. See section 5.7 for details.
4. Basics

\textbf{index} = \{\langle text \rangle\}

This key allows to overwrite the automatic index entry with an arbitrary one. See section 5.7 for details.

\textbf{index-cmd} = \{\langle text \rangle\}

This key lets you set an individual index creating command for this acronym. It should be a command that takes one mandatory argument. See section 5.7 for details.

In its simplest form an acronym needs a short and a long form. Please note that both keys \textit{must} be set and that the \texttt{short} = \{\langle k \rangle\}ey must always be the \textit{first} key that is set.

\begin{verbatim}
\% preamble:
\DeclareAcronym{test}{
  short = ST ,
  long = Some Test
}
\end{verbatim}

This creates the acronym “ST” with the ID “test” and the long form “Some Test.”

The \texttt{format} key allows you to choose a specific format for the short form of an acronym:

\begin{verbatim}
\% preamble:
\DeclareAcronym{ot}{
  short = ot ,
  long = Other Test ,
  short-format = \scshape
}
\end{verbatim}

The short form now looks like this: \texttt{ot}.

The \texttt{cite} key needs a bit explaining. It expects arguments like the standard \texttt{\cite} command, \textit{i.e.,} two optional arguments setting the \langle \texttt{prenote} \rangle and \langle \texttt{postnote} \rangle and one mandatory argument setting the citation key.

\begin{verbatim}
\% preamble:
\DeclareAcronym{ny}{
  short = NY ,
  short-plural = ,
  long = New York ,
  long-plural = ,
  cite = \{NewYork\}
}
\end{verbatim}
The first appearance now looks as follows\(^9\): New York (NY) [Wikipedia].

### 4.2. Using the Acronyms – the Commands

Acronyms are used with one of the following commands:

- \texttt{\textbackslash \textbackslash ac*\{id\}}
  - basic command; the first output is different from subsequent ones.

- \texttt{\textbackslash Ac*\{id\}}
  - same as \texttt{\textbackslash ac} but capitalizes the first letter of the long form.

- \texttt{\textbackslash acs*\{id\}}
  - short form; the actual acronym.

- \texttt{\textbackslash acl*\{id\}}
  - long form; the meaning of the acronym.

- \texttt{\textbackslash AcI*\{id\}}
  - same as \texttt{\textbackslash acl} but capitalizes first letter.

- \texttt{\textbackslash aca*\{id\}}
  - alternative short form as specified in the \texttt{alt} key of \texttt{\textbackslash DeclareAcronym}; if it hasn’t been specified this is identical to \texttt{\textbackslash acs}.

- \texttt{\textbackslash acf*\{id\}}
  - first form; output like the first time \texttt{\textbackslash ac} is output.

- \texttt{\textbackslash Acf*\{id\}}
  - same as \texttt{\textbackslash acf} but capitalizes first letter of the long form.

---

\(^9\) The appearance of the citation of course depends on the citation style you’re using.
4. Basics

\ac*{\{id\}}
plural form of \ac;

\Acp*{\{id\}}
same as \acp but capitalizes first letter of the long form.

\acsp*{\{id\}}
plural form of \acs;

\aclp*{\{id\}}
plural form of \acl;

\Aclp*{\{id\}}
same as \aclp but capitalizes first letter.

\acap*{\{id\}}
plural form of \aca;

\acfp*{\{id\}}
plural form of \acf;

\Acfp*{\{id\}}
same as \acfp but capitalizes first letter of the long form.

If an acronym is used the first time with \ac its output is different from subsequent uses. To be clear on this: the first time! If the acronym has been used with any of the output commands before it is not the first time any more.

If you use the starred variant an acronym will not be marked as used. This proves useful if an acronym is typeset in a section title, for example, since then the appearance in the table of contents won’t mark it as used.

% preamble:
% \DeclareAcronym{cd}{
% short = cd ,
% long = Compact Disc ,
% short-format = \scshape
% } 
% first time: \ac{cd} \\
% second time: \ac{cd} \\
% short: \acs{cd} \\
% alternative: \aca{cd} \\
% first again: \acf{cd} \\
% long: \acl{cd} \\
% short plural: \acsp{cd} \\
% long plural: \aclp{cd} 

first time: Compact Disc (\textsc{cd})
second time: \textsc{cd}
short: \textsc{cd}
alternative: \textsc{cd}
first again: Compact Disc (\textsc{cd})
long: Compact Disc
short plural: \textsc{cds}
long plural: Compact Discs
If an acronym is defined in the standard way \acro uses an 's' that's appended to both the short and the long form when one of the plural commands is used. However, that is not always the best solution. For one thing not all acronyms may have a plural form. Second, the plural form especially of the long forms may be formed differently. And third, other languages can have other plural endings.

For these reasons \DeclareAcronym can get the following keys:

- short-plural = {⟨text⟩} Default: s
  The plural ending of the short form.

- long-plural = {⟨text⟩} Default: s
  The plural ending of the long form.

- long-plural-form = {⟨text⟩}
  An alternative plural form for the long form.

These keys are optional. If they're not used, the default setting is s. If you use long-plural-form the long form will be replaced by the specified plural form when necessary.

Suppose we define the following acronyms:

```latex
\DeclareAcronym{cd}{
  short = cd ,
  long = Compact Disc ,
  short-format = \scshape
}
\DeclareAcronym{ny}{
  short = NY ,
  short-plural = ,
  long = New York ,
  long-plural =
}
\DeclareAcronym{sw}{
  short = SW ,
  long = Sammelwerk ,
  long-plural = e
}
\DeclareAcronym{MP}{
  short = MP ,
  long = Member of Parliament ,
  long-plural-form = Members of Parliament
}
```

These acronyms now have the following plural appearances:


4. Basics

\begin{itemize}
\item \acs{cd}, \aclp{cd} \hspace{1cm} \text{CDS, Compact Discs}
\item \acs{ny}, \aclp{ny} \hspace{1cm} \text{NY, New York}
\item \acs{sw}, \aclp{sw} \hspace{1cm} \text{SWs, Sammelwerke}
\item \acs{mp}, \aclp{mp} \hspace{1cm} \text{MPs, Members of Parliament}
\end{itemize}

4.4. Alternative Short Forms

For some acronyms it might be useful to have alternative forms. For this \texttt{\DeclareAcronym} has another key:

\begin{verbatim}
alt = {⟨text⟩}
\end{verbatim}

Alternative short form.

\begin{verbatim}
% preamble:
% \DeclareAcronym{jpg}{
%  short = JPEG ,
%  alt = JPG ,
%  long = Joint Photographic Experts Group
% }
% default: \acs{jpg} \\%
% alt.: \aca{jpg}

default: JPEG
alt.: JPG
\end{verbatim}

The alternative form uses the same plural ending as the default short form and is formatted in the same way.

4.5. Extra Information for the List Entry

Of course you can print a list of acronyms where their meaning is explained. Sometimes it can be useful to add additional information there. This is done with another key to \texttt{\DeclareAcronym}:

\begin{verbatim}
extra = {⟨text⟩}
\end{verbatim}

Additional information for the list of acronyms.

These information will only be displayed in the list. See section 6 for the impact of the following example.
4. Basics

The North Atlantic Treaty Organization (NATO) is an intergovernmental military alliance based on the North Atlantic Treaty which was signed on 4 April 1949. NATO headquarters are in Brussels, Belgium, one of the 28 member states across North America and Europe, the newest of which, Albania and Croatia, joined in April 2009.

4.6. Foreign Language Acronyms

I repeatedly read the wish for being able to add translations to acronyms when the acronyms stem from another language than the document language, i.e., something like the following in a German document:

\ac{ecu} Steuergerät (Electronic Control Unit, ECU)

\ac{ecu}

That’s why I decided to add the following key:

foreign = \{\textit{original long form}\}

A description for an acronym originating in another language than the document language.

Here is the definition of the above mentioned ECU acronym:

```latex
\DeclareAcronym{ecu}{
  short = ECU,
  long = Steuergerät,
  foreign = Electronic Control Unit
}
```
As you have seen this adds the foreign entry to the first appearance of an acronym. It is also added in parentheses to the list of acronyms after the long entry. Actually the entry there is the argument to the following command:

\acroenparen{⟨argument⟩}
Places ⟨argument⟩ in parentheses: \acroenparen{example}: (example). See page 19 for a way to customize this other than redefining it.

5. Additional Commands and Possibilities

5.1. Indefinite Forms

Unlike many other languages in English the indefinite article is not determined by the grammatical case, gender or number but by the pronunciation of the following word. This means that the short and the long form of an acronym can have different indefinite articles. For these cases ACRO offers the keys short-indefinite, alt-indefinite and long-indefinite whose default is a. For every lowercase singular command two alternatives exist, preceded by i and I, respectively, which output the lowercase and uppercase version of the corresponding indefinite article.

\% preamble:
\% \DeclareAcronym{ufo}{
\% short = UFO ,
\% long = unidentified flying object ,
\% long-indefinite = an
\% }
\iacl{ufo}; \iacls{ufo}; \iacl{ufo}

An unidentified flying object (UFO); a UFO; an unidentified flying object

5.2. Uppercasing

\acfirstupper{⟨token list⟩}
This command uppercases the first token in ⟨token list⟩. The command is less powerful than \makefirstuc that is provided by the mfirstuc package [Tal12] but it is expandable. Obvious downsides are for example that it does not uppercase accented letters.

5.3. Simulating the First Appearance

Users told me that there are cases when it might be useful to have the the acronym typeset according to the first-style but with another text than the long form. For such cases ACRO

---

10. Let’s better say: unlike the other languages where I know at least the basics.
11. Well – one, to be precise :)
5. Additional Commands and Possibilities

offers the following commands.

\acflike*{(id)}{(instead of long form)}

Write some alternative long form for acronym \textit{id} as if it were the first time the acronym was used.

\acfplike*{(id)}{(instead of long form)}

Plural form of \textit{acflike}.

\begin{itemize}
  \item \acsetup{first-style=footnote}
  \item \acflike{ny}{the big apple}
  \begin{tabular}{ll}
    NY & a the big apple [Wik12b]
  \end{tabular}
\end{itemize}

The plural ending in \textit{acflike} is only appended to the short form. It makes no sense to append it to the text that is inserted manually anyway. Note that whatever text you’re inserting might be gobbled depending on the \textit{first-style} you’re using.

\subsection*{5.4. Using Classes}

The acronyms of \texttt{acro} can be divided into different classes. This doesn’t change the output but allows different acronym lists, see section 6. For this \texttt{DeclareAcronym} has an additional key:

\begin{verbatim}
\texttt{class} = \{(text)\}
\end{verbatim}

\texttt{class} = \{(text)\}

Associated class for an acronym.

This might be useful if you can and want to divide your acronyms into different types, technical and grammatical ones, say, that shall be listed in different lists.

\begin{verbatim}
% preamble:
\% \DeclareAcronym{la}{
  \% short = LA ,
  \% short-plural = ,
  \% long = Los Angeles ,
  \% long-plural = ,
  \% class = city
  \% }
\% \DeclareAcronym{ny}{
  \% short = NY ,
  \% short-plural = ,
  \% long = New York ,
  \% long-plural = ,
  \% class = city
  \% cite = NewYork
  \% }
\acl{la} (\acs{la}) \\
\acl{ny} (\acs{ny})
\end{verbatim}

Los Angeles (LA)
New York (NY)
5. Additional Commands and Possibilities

5.5. Reset or Mark as Used, Test if Acronym Has Been Used

If you want for some reason to fool \acro into thinking that an acronym is used for the first time you can call one of these commands:

\acreset{⟨comma separated list of ids⟩}

This will reset a used acronym such that the next use of \ac will again print it as if it were used the first time. This will not remove an acronym from being printed in the list if it actually has been used before.

\acresetall

Reset all acronyms.

\acifused{⟨id⟩}{⟨true⟩}{⟨false⟩}

This command tests if the acronym with ID ⟨id⟩ has already been used and either puts true or false in the input stream.

Introduced in version 0.5

\acreset{ny}\ac{ny} New York (NY) [Wik12b]

Beware that both commands act globally! There are also commands that effectively do the opposite of \acreset, i.e., mark acronyms as used:

\acuse{⟨comma separated list of ids⟩}

This has the same effect as if an acronym had been used twice, that is, further uses of \ac will print the short form and the acronym will in any case be printed in the list (as long as its class is not excluded).

\acuseall

Mark all acronyms as used.

5.6. \ac and Friends in PDF Bookmarks

\acro’s commands usually are not expandable which means they’d leave unallowed tokens in PDF bookmarks. hyperref offers \texorpdfstring to circumvent that issue manually but that isn’t really a nice solution. What’s the point of having macros to get output for you if you have to specify it manually after all?

That is why \acro offers a preliminary solution for this. In a bookmark every \ac like command falls back to a simple text string typesetting what \acs would do (or \acsp for plural forms). These text strings both can accessed manually and can be modified to an output reserved for PDF bookmarks.

\acpdfstring{⟨id⟩}

Access the text string used in PDF bookmarks.
Access the plural form of the text string used in PDF bookmarks.

\acpdfstringplural\{\(\langle id \rangle\)}

Key for \texttt{\textbackslash DeclareAcronym} to declare a custom text string for PDF bookmarks. The plural ending can be set optionally.

\texttt{\textbackslash accsupp} = \{\{\texttt{\textbackslash text}\}\}

Key for \texttt{\textbackslash DeclareAcronym} to set the ActualText property of \texttt{\BeginAccSupp} (see accsupp’s documentation for details) to be used for an acronym. It only has an effect when the package option accsupp is used, too.

For example the PDF acronym used in the title for this section is defined as follows:

\begin{verbatim}
\DeclareAcronym{pdf} {
  short = pdf ,
  long = Portable Document Format ,
  format = \scshape ,
  pdfstring = PDF ,
  accsupp = PDF
}
\end{verbatim}

This also demonstrates the accsupp key. For this to work you need to use the package option accsupp, too, which will load the package accsupp. Then the key accsupp will set the ActualText property of \texttt{\BeginAccSupp}. Please refer to accsupp’s documentation for details. To see its effect copy PDF and paste it into a text file. You should get uppercase letters instead of lowercase ones.

\section*{5.7. Adding Acronyms to the Index}

\texttt{ACRO} has the package option \texttt{index}. If it is used an index entry will be recorded every time an unstarred acronym command is used. The index entry will be \(\langle id\rangle@\langle short\rangle\), \(\langle sort\rangle@\langle short\rangle\) if the \texttt{sort} key has been set, \(\langle index-sort\rangle@\langle short\rangle\) if the \texttt{index-sort} has been set, or \(\langle index\rangle\) if the key \texttt{index} has been set for the specific acronym. The short versions appearing there are formatted according to the chosen format of the corresponding acronym, of course.

This document demonstrates the feature. You can find every acronym that has been declared in the index. In order to allow flexibility the indexing command can be chosen both globally via package option and individually for every acronym. This would allow to add acronyms to a specific index if more than one index is used, for example with help of the \texttt{imakeidx} package.

I’m not yet convinced this is a feature many people if anyone needs and if they do if it is flexible enough. If you have any thoughts on this I’d appreciate an email.
6. Printing the List

Printing the whole list of acronyms is easy: just place \texttt{\printacronyms} wherever you want the list to be.

\texttt{\printacronyms[]}\texttt{(options)}

Print the list of acronyms.

The commands takes a few options, namely the following ones:

**include-classes** = \{\texttt{list of classes}\}

Takes a comma-separated list of the classes of acronyms that should be in the list.

**exclude-classes** = \{\texttt{list of classes}\}

Takes a comma-separated list of the classes of acronyms that should not be in the list.

**name** = \{\texttt{name of the list}\}

sets the name for the list.

**heading** = \{\texttt{sectioning command without leading backslash}\}  \textbf{Default: section*}

Sets the sectioning command for the heading of the list. A special value is \texttt{none} which suppresses the heading.

**sort** = \texttt{true}|\texttt{false}  \textbf{Default: true}

Set sorting for this list only.

\begin{verbatim}
\acsetup{extra-style=comma}
\printacronyms[exclude-classes=city]
\printacronyms[include-classes=city,name={City Acronyms}]
\end{verbatim}

\textbf{Acronyms}

\textbf{cd}  Compact Disc

\textbf{ctan}  Comprehensive \TeX{} Archive Network

\textbf{ECU}  Steuergerät (Electronic Control Unit)

\textbf{id}  identification string

\textbf{JPEG}  Joint Photographic Experts Group

\textbf{MP}  Member of Parliament
7. Options and Customization

**NATO** North Atlantic Treaty Organization, *deutsch*: Organisation des Nordatlantikvertrags

**PDF** Portable Document Format

**SW** Sammelwerk

**ST** Some Test

**UFO** unidentified flying object

**City Acronyms**

**LA** Los Angeles

**NY** New York

You can see that the default layout is a description list with a \section* title. Both can be changed, see section 7.

The command \printacronyms needs two \LaTeX runs. This is a precaution to avoid error messages with a possibly empty list. But since almost all documents need at least two runs and often are compiled much more often than that, this fact shouldn’t cause too much inconvenience.

7. Options and Customization

7.1. General Options

There are a few options which change the general behaviour of ACRO. Underlined values are used if no value is given.

- **messages** = silent|loud
  Default: loud
  Setting messages = {silent} will turn all of ACRO’s error messages into warnings and all of ACRO’s warnings into info messages. Be sure to check the log file carefully if you decide to set this option.

- **single** = true|false
  Default: false
  If set to true an acronym that’s used only once (with \ac) in a document will only print the long form and will not be printed in the list.

- **hyperref** = true|false
  Default: false
  If set to true the short forms of the acronyms will be linked to their list entry.

- **label** = true|false
  Default: false
  If set to true this option will place \label{⟨prefix⟩⟨id⟩} the first time the acronym with id ⟨id⟩ is used.

- **label-prefix** = ⟨{text}⟩
  Default: ac:
  The prefix for the \label that is placed when option label = {true} is used.
7. Options and Customization

record-pages = true|false  
Default: true
Since \acro{} can handle arabic, roman and Roman page numbers but not any other kind of numbering this option allows to turn the page number recording off for these cases as it would lead to errors else. This affects the whole document and can only be set in the preamble! It means you cannot have page numbers in the list of acronyms in this case. Or rather: you can if you use pages = \{first\}.

only-used = true|false  
Default: true
This option is true as default. It means that only acronyms that are actually used in the document are printed in the list. If false, all acronyms defined with \DeclareAcronym will be written to the list.

mark-as-used = first|any  
Default: any
This option determines whether an acronym is marked as used when the first form is used the first time (with \ac, \acf or \acflike and their uppercase, plural and indefinite forms) or when any of the \ac-like commands is used.

macros = true|false  
Default: false
If set to true this option will create a macro \id{⟨id⟩} for each acronym as a shortcut for \ac{⟨id⟩}. Already existing macros will not be overwritten.

xspace = true|false  
Default: false
Introduced in version 0.6
If set to true this option will append \xspace{} from the xspace package to the commands created with the macros option.

strict = true|false  
Default: false
If set to true and the option macros = \true{} is in effect then already existing macros will be overwritten.

sort = true|false  
Default: true
Introduced in version 1.2
If set to true the acronym list will be sorted automatically. The entries are sorted by their id ignoring upper and lower case. This option needs the experimental package \lthree{} (from the \lthree{} experimental bundle) and can only be set in the preamble.

cite = all|first|none  
Default: first
This option decides whether citations that are added via cite are added to each first, every or no appearance of an acronym.

cite-cmd = \{ ⟨control sequence⟩ \}  
Default: \cite{}
This option determines which command is used for the citation. Each citation command that takes the cite key as argument is valid, for example biblatex’s \footcite{}.

cite-space = \{ ⟨code⟩ \}  
Default: \nobreakspace{}
Depending on the citation command in use a space should be inserted before the citation or maybe not (e.g. \footcite{}...). This option allows you to set this. Actually it can be used to place arbitrary code right before the citation.
7. Options and Customization

**index** = true\|false  
Default: false  
If set to true an index entry will be recorded every time an unstarred acronym command is used for the corresponding acronym.

**index-cmd** = \{⟨control sequence⟩\}  
Default: \index  
Chooses the index command that is used when option **index** has been set to true.

**accsupp** = true\|false  
Default: false  
Introduced in version 1.1  
Activates the access support as provided by the accsupp package.

**uc-cmd** = \{⟨control sequence⟩\}  
Default: \mfirstuc  
The command that is used to capitalize the first word in the \Ac and the like commands. You can change it to another one like for example \makefirstuc or \MakeTextUppercase.

All options of this and the following sections can be set up either as package options or via the setup command:

\acsetup\{⟨options⟩\}
Set up **ACRO** anywhere in the document. Or separate package loading from setup.

---

---

we could have used these before: NATO, NY

---

7.2. Options Regarding Acronyms

The options described in this section all influence the layout of one of the possible output forms of the acronyms.

**short-format** = \{⟨format⟩\}  
(initially empty)
Sets a format for all short forms. For example short-format = \{\scshape\} would print all short forms in small caps.

**long-format** = \{⟨format⟩\}  
(initially empty)
The same for the long forms.

**foreign-format** = \{⟨format⟩\}  
(initially empty)
The format for the **foreign** entry when it appears as part of the first appearance of an acronym.

---

12. from the mfirstuc package  
13. from the textcase package
# Options and Customization

**first-long-format** = {{(format)}}

(initially empty)

The format for the long form on first usage (with \ac, \acf or \acflke and their uppercase, plural and indefinite forms).

**list-short-format** = {{(format)}}

(initially empty)

An extra format for the short entries in the list. If not used this is the same as short-format. Please be aware that a call of short-format after this one will overwrite it again.

**list-long-format** = {{(format)}}

(initially empty)

An extra format for the long entries in the list. If not used this is the same as long-format. Please be aware that a call of long-format after this one will overwrite it again.

**list-foreign-format** = {{(format)}}

Default: \acroenparen

The format for the foreign entry as it appears in the list. This may be code that ends with a macro that takes a mandatory argument.

**extra-format** = {{(format)}}

(initially empty)

The same for the extra information.

**first-style** = default|plain|empty|square|short|reversed|plain-reversed|footnote|sidenote

Default: default

The basic style of the first appearance of an acronym. The value sidenote needs the command \sidenote to be defined for example by the sidenotes package.

**extra-style** = default|plain|comma|paren|bracket

Default: default

Defines the way the extra information is printed in the list.

**plural-ending** = {{(tokenlist)}}

Default: s

With this option the default plural ending can be set.

---

```latex
\acrosetup{first-style=empty}
\acf{ny} \\\n\acrosetup{first-style=footnote}
\acf{ny} \\[\text{NY}]
\acrosetup{first-style=square}
\acf{ny} \\[\text{NY}]
\acrosetup{first-style=short}
\acf{ny} \\[\text{NY (New York)}]
\acrosetup{first-style=reversed}
\acf{ny} \\[\text{New York}]
\acrosetup{first-style=plain}
\acf{ny} \\[\text{New York}]
\acrosetup{first-style=plain-reversed}
\acf{ny}
```

---

New York [NY] [Wik12b]

NY [Wik12b]

NY (New York) [Wik12b]

New York – NY [Wik12b]

NY – New York [Wik12b]

\(a\) New York [Wik12b]
7. Options and Customization

7.3. Options Regarding the List

\texttt{page-ref = none|plain|comma|paren} \hspace{1cm} Default: none

If this option is set to a value other than none the page numbers of the an acronym appeared on are printed in the list. Please note that this is an experimental feature and might fail in quite a number of cases. If you notice anything please send me an email!

\texttt{pages = all|first} \hspace{1cm} Default: all

If the option \texttt{page-ref} has any value other than none this option determines wether all usages of the acronyms are listed or only the first time. Implicitly sets \texttt{label = \{true\}}.

\texttt{page-name = \{\langle page name \rangle\}} \hspace{1cm} Default: p\,.,@,\.

The “name” of the page label. This is automatically translated to the active language. However for the time being there are many translations missing, yet. Please notify me if you find your language missing.

\texttt{pages-name = \{\langle page name plural \rangle\}} \hspace{1cm} Default: pp\.,@,\.

The “name” of the page label when there are more than one page. This is automatically translated to the active language. However for the time being there are many translations missing, yet. Please notify me if you find your language missing.

\texttt{following-page = true|false} \hspace{1cm} Default: false

If set to \texttt{true} a page range in the list of acronyms that consists of two pages will be written by the first page and an appended \texttt{f}. This depends on the option \texttt{next-page}.

\texttt{following-pages = true|false} \hspace{1cm} Default: false

If set to \texttt{true} a page range in the list of acronyms that set consists of more than two pages will be written by the first page and an appended \texttt{ff}. This depends on the option \texttt{next-pages}.

\texttt{next-page = \{\langle text \rangle\}} \hspace{1cm} Default: \,f.,@

Appended to a page number when \texttt{following-page} is set to \texttt{true} and the range is only 2 pages long. This is automatically translated to the active language. However, for the time being there are many translations missing, yet. Please notify me if you find your language missing.

\texttt{next-pages = \{\langle text \rangle\}} \hspace{1cm} Default: \,ff.,@

Appended to a page number when \texttt{following-pages} is set to \texttt{true} and the range is more than 2 pages long. This is automatically translated to the active language. However, for the time being there are many translations missing, yet. Please notify me if you find your language missing.

\texttt{list-type = table|\langle list \rangle} \hspace{1cm} Default: description

This option let’s you choose how the list is printed. \langle list \rangle can be any valid list like itemize or description.

\texttt{list-style = list|tabular|longtable|extra-tabular|extra-longtable|extra-tabular-rev| extra-longtable-rev} \hspace{1cm} Default: list

If you choose \texttt{list-type = \{table\}} you have to specify which kind of table should be used. If you choose longtable, extra-longtable or extra-longtable-rev you have to load longtable
in your preamble. The values `extra-longtable` and `extra-longtable-rev` put the extra information in a column of its own.

```
\begin{longtable}
\hline
\textbf{list-heading} = \texttt{chapter|chapter*|section|section*|subsection|subsection*|addchap|addsec|none}
\hline
Default: \texttt{section*}
\hline
\texttt{list-name} = \{\langle list name \rangle\}
\hline
Default: \texttt{Acronyms}
\hline
\texttt{list-table-width} = \{\langle dimension \rangle\}
\hline
Default: \texttt{.7\linewidth}
\hline
\texttt{list-caps} = \texttt{true|false}
\hline
Default: \texttt{false}
\hline
\end{longtable}
```

The heading type of the list. The last two only work with a KOMA-Script class that also defines the appropriate command. A special value is \texttt{none} which suppresses the heading.

The name of the list. This is what’s written in the list-heading. This is automatically translated to the active language. However, for the time being there are many translations missing, yet. Please notify me if you find your language missing.

This has only an effect if you chose `\texttt{list-type = \{\langle table \rangle\}}`. The second column (or the third if you choose one of the \texttt{-rev} styles) of the table is a \texttt{p} column whose width can be specified with this option.

Print the first letters of the long form capitalized.

If you for example have loaded `enumitem` you can define a custom list for the acronym list:

```
% preamble:
\% \usepackage{enumitem}
\newlist{acronyms}{description}{1}
\newcommand*{\addcolon}[1]{#1:}
\setlist[acronyms]{
labelwidth=3em,
leftmargin=3.5em,
noitemsep,
itemindent=0pt,
font=\addcolon}
\acsetup{list-type=acronyms,hyperref=false,extra-style=comma}
\printacronyms
```

### Acronyms

- **CD**: Compact Disc
- **CTAN**: Comprehensive \TeX\ Archive Network
- **ECU**: Steuergerät (Electronic Control Unit)
- **ID**: identification string
8. About Page Ranges

If you enable the page-ref option ACRO adds page numbers to the list of acronyms. In version 0.7 it would add a page reference for an acronym in the list of acronyms that used \pageref to refer to the first appearance of an acronym. This is retained using version = {0}. Version 1.0 uses a different approach that doesn’t use a label but instead will list all pages an acronym appeared on. With hyperref the pages are referenced using \hyperpage.

There are some options that control how this list will be typeset, e.g., following-page, next-pages or the option page-ref itself. It is important to mention that the page list will always take at least two compilation runs until changes in the options or the actual page numbers affect it. This is due to the fact that the updated sequence is first written to the aux file and only read in during the next run.

9. Language Support

ACRO detects if packages babel or polyglossia are being loaded and tries to adapt certain strings to match the chosen language. However, due to my limited language knowledge only a few translations are provided. I’ll show how the English translations are defined so you can add the translations to your preamble if needed. Even better would be you’d send me a short email at contact@mychemistry.eu with the appropriate translations for your language and I’ll add them to ACRO.

\begin{verbatim}
1 \DeclareTranslation{English}{acronym-list-name}{Acronyms}
2 \DeclareTranslation{English}{acronym-page-name}{p.}
3 \DeclareTranslation{English}{acronym-pages-name}{pp.}
4 \ DeclareTranslation{English}{acronym-next-page}{f.}
5 \DeclareTranslation{English}{acronym-next-pages}{ff.}
\end{verbatim}
10. hyperref Support

The option \texttt{hyperref = \{true\}} adds internal links from all short (or alternative) forms to their respective list entries. Of course this only works if you have loaded the \texttt{hyperref} package in your preamble. You should use this option with care: if you don’t use \texttt{\printacronyms} anywhere this option will result in loads of \texttt{hyperref} warnings. Also printing several lists can result in warnings if don’t clearly separate the lists into different classes. If an acronym appears in more than one list there will also be more than one hypertarget for this acronym.

Using \texttt{hyperref} will also add \texttt{\hyperpage} to the page numbers in the list (provided they are displayed in the style chosen). Like with an index the references will thus not point to the acronyms directly but to the page they’re on.

A. Commands provided in version 0.*

Prior to version 1.0 the following commands were available. They are still provided if you set the option \texttt{version = \{0\}}. They will be mentioned here shortly but they won’t be explained any more. If you’d like a more thorough description ask me for the documentation to version 0.6a.

\begin{verbatim}
\DeclareAcronym*{⟨id⟩}{⟨short⟩,⟨pl⟩}{⟨alt.⟩}{⟨long⟩,⟨pl⟩}{⟨extra⟩}{⟨class⟩}
% can be used only in preamble
\DeclareAcronymFormat{⟨id⟩}{⟨format⟩}
% can be used only in preamble
\DeclareAcronymCitation{⟨id⟩}{⟨pre⟩}{⟨post⟩}{⟨cite keys⟩}
% can be used only in preamble
\DeclareAcronymPDFString{⟨id⟩}{⟨pdf entry⟩,⟨plural ending⟩}
% can be used only in preamble
\end{verbatim}

B. All Acronyms Used in this Documentation

\begin{verbatim}
\acsetup{
  list-type = table,
  list-style = longtable,
  list-heading = subsection*,
  extra-style = comma,
  page-ref = comma
}
\printacronyms[name=All Acronyms]
\end{verbatim}

All Acronyms
References

CD    Compact Disc, pp. 7, 9
CTAN  Comprehensive \TeX{} Archive Network, p. 2
ECU   Steuergerät (Electronic Control Unit), p. 10
ID    identification string, pp. 4, 5, 13, 16, 17
JPEG  Joint Photographic Experts Group, p. 9
LA    Los Angeles, p. 12
MP    Member of Parliament, p. 9
NATO  North Atlantic Treaty Organization, \emph{deutsch}: Organisation des Nordatlantikvertrags, pp. 10, 18
NY    New York, pp. 6, 9, 12, 13, 18, 19
PDF   Portable Document Format, pp. 4, 13, 14
SW    Sammelwerk, p. 9
ST    Some Test, p. 5
UFO   unidentified flying object, p. 11

\begin{acronymlist}
\item[CD] Compact Disc, pp. 7, 9
\item[CTAN] Comprehensive \TeX{} Archive Network, p. 2
\item[ECU] Steuergerät (Electronic Control Unit), p. 10
\item[ID] identification string, pp. 4, 5, 13, 16, 17
\item[JPG] Joint Photographic Experts Group, p. 9
\item[LA] Los Angeles, p. 12
\item[MP] Member of Parliament, p. 9
\item[NATO] North Atlantic Treaty Organization, \emph{deutsch}: Organisation des Nordatlantikvertrags, pp. 10, 18
\item[NY] New York, pp. 6, 9, 12, 13, 18, 19
\item[PDF] Portable Document Format, pp. 4, 13, 14
\item[SW] Sammelwerk, p. 9
\item[ST] Some Test, p. 5
\item[UFO] unidentified flying object, p. 11
\end{acronymlist}

City Acronyms

\begin{itemize}
\item LA Los Angeles, p. 12
\item NY New York, pp. 6, 9, 12, 13, 18, 19
\end{itemize}

References

\begin{itemize}
\item\texttt{\[Nie13\]} Clemens Niederberger. \emph{translations}. version 1.1a, Sept. 30, 2013. URL: \url{http://mirror.ctan.org/macros/latex/contrib/translations/}.
\item\texttt{\[Oet12\]} Tobias Oetiker. \emph{acronym}. \emph{An Acronym Environment for \LaTeX{}} version 1.38, Oct. 29, 2012. URL: \url{http://mirror.ctan.org/macros/latex/contrib/acronym/}.
\item\texttt{\[Swi01\]} Matt Swift. \emph{abbrevs}. version 1.4, Sept. 8, 2001. URL: \url{http://mirror.ctan.org/macros/latex/contrib/frankenstein/abbrevs/}.
\end{itemize}
References

url: http://mirror.ctan.org/macros/latex/contrib/glossaries/.

url: http://mirror.ctan.org/macros/latex/contrib/glossaries/.

url: http://mirror.ctan.org/macros/latex/contrib/acromake/.

[Vey+05] Boris Veytsman et al. 
url: http://mirror.ctan.org/macros/latex/contrib/nomencl/.

url: http://mirror.ctan.org/macros/latex/contrib/acroterm/.


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